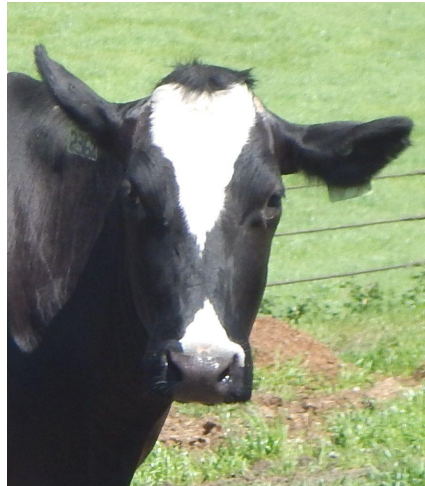


Proposed General Waste Discharge Requirements for Dairies



Item No. 9
April 18, 2019
Cherie Blatt
NCRWQCB





In Your Packet

Proposed Order R1-2019-0001 GWDR, redline/strikeout version

- Attachment A - Notice of Intent (NOI)
- Attachment B - Title 27- California Code of Regulations, sect: 22560-22565
- Attachment C - Definitions
- Attachment D - Monitoring and Reporting Program (MRP)
 - Appendix 1 - Water Quality Plan (WQP) with Riparian Management Plan
 - Appendix 2 - Nutrient Management Plan (NMP) with Work Sheet
 - Appendix 3 - Annual Report
- Attachment E - Tribal Cultural Resources Mitigation Program
- Attachment F - Initial Study and Mitigated Negative Declaration

Response to Comments

Comment letters received

Notices of Public Hearing

Change Sheet



Presentation Outline

1. Timeline

- 2012 Dairy Program
- 2019 Order Development

2. Proposed General Waste Discharge Requirements

3. Public Comments

4. Changes Made to the Order

- Changes in the Proposed Order
- Change Sheet

5. Staff Recommendation

Timeline of Existing Dairy Program

National Pollutant Discharge Elimination System (NPDES)	R1-2012-0001	Needs renewing every 5 years
General Waste Discharge Requirements (GWDR)	R1-2012-0002	3 enrolled
Conditional Waiver	R1-2012-0003	Extended
Individual Waiver	R1-2015-0051	1 enrolled
Extension of Conditional Waiver	R1-2016-0045	120 enrolled



Reasons for a GWDR

- New facilities
- Condense many permits into one consistent tool for regulation
- To address potential to discharge
- Beginning in 2012, started a successful program
- Learned a lot
- Don't need to renew every 5 years



2019 Order Development

- Stakeholder outreach 2017-2019
- California Environmental Quality Act (CEQA)
 - ✓ Public scoping meetings 2017
 - ✓ Initial Study/Mitigated Negative Declaration
 - ✓ Public Comment Period - 64 days: Nov. 2018 – Jan. 2019
- Public Workshop November 2018 Board Meeting
- Public Notices – Nov. 2018, Mar. 2019
- Lyris E-subscription Announcements for updates



Proposed GWDR

What Size Dairies Are Covered?

- 25 cow/water buffalo minimum
- 100 goat/sheep minimum

Dairies smaller than this:

- Are not required to submit plans/monitoring
- Must meet Discharge Prohibitions
- Executive Officer (EO) may require enrollment if potential for discharge to surface water or groundwater

Requirement Comparison	2012	2019
Cows	✓	✓
Existing Dairies	✓	✓
Goat, Sheep, Water Buffalo	-	✓
New Dairies	-	✓
Expanding Dairies	-	✓
Previously Inactive Dairies	-	✓
Minimum Size: 25 cow/water buffalo 100 goat/sheep	-	✓

Requirement Comparison	2012	2019
Water Quality Plan	✓	✓
Annual Reports	✓	✓
Waste Discharge Specifications	✓	△
Nutrient Management Plan	✓	△
Surface Water Monitoring	✓	△
Groundwater Monitoring	✓	△
Riparian Management Plan	-	+
Tribal Cultural Resources	-	+

✓ = Existing, - = Absent, △ = Changed, + = New



Waste Discharge Specifications

Unchanged: Title 27 of CA Code of Regulations

- Exclude animals from surface waters in the confined area
- Retain facility wastewater/rain during 25-year 24-hour storm
- Protect manure ponds from inundation/washout
- Manure pond liner requirements
- Nutrients applied to land at agronomic rates
- Wastewater discharges to land managed to minimize percolation to groundwater
- Manured areas managed to minimize infiltration of water into underlying soils (22564)



Waste Discharge Specifications (cont'd)

Unchanged Conditions:

- Manure pond: capacity/freeboard/cleanout
- Seepage requirements for new manure ponds
- Land application areas

New Conditions:

- Riparian management
- Nutrient management
- Tribal cultural resources protection



Riparian Management

- Develop and implement a Riparian Management Plan
- Requires protection of riparian areas
- Control animal access to surface waters
- Performance requirements
- Monitoring/photos provided in Annual Reports



Nutrient Management Plans (NMPs)

- 2012 – Required for ≥ 700 mature cows
- 2019 – Required for all dairies that apply manure or graze > 30 days/year
 - Completion by Nov. 30, 2020
 - Submit by December 31, 2020
 - Worksheet by November 30, 2021
 - NMP developed by soil/crop specialist
 - Manure/process water management
 - Nutrient budget/water quality protection



Tribal Cultural Resources Mitigation Program

- AB52 (Gatto 2015): assessment of tribal cultural resources for CEQA
- Consultation with tribes, if requested
- Worked with State Water Board Archaeologist
- Existing dairies: if artifacts discovered, consult an archaeologist
- New dairies: archaeology survey required
- If archaeologist determines the artifact may be significant, then consult with tribe on protection



Surface Water Monitoring

Parameter	2012	2019
Electrical Conductivity	✓	✓
Ammonia	✓	✓
pH	✓	
Temperature	✓	
E. coli bacteria (in freshwater)		✓
Enterococci bacteria (in salt water)		✓

2019 MRP Requirements:

- Monitoring above and below all dairies
- 3 times per winter, during ≥ 1 " in 24 hours
- Dry season visual inspection of potential biostimulatory conditions
- Group monitoring if approved by EO



Groundwater Monitoring

Parameter	2012	2019*
Nitrate	4X in 2 years	Year 1, 2, 3, +2 yrs
Fecal coliform bacteria	4X in 2 years	-
Total coliform bacteria	-	Year 1, 2, 3, +2 yrs
Total dissolved solids	-	Year 1, 2, 3, +2 yrs

*2019 MRP Requirements:

- Representative wells
- If nitrate results \geq half of MCL, then increased monitoring and adaptive management required
- Total coliform measured only in domestic wells
- Electronic data submittal
- Group monitoring if approved by EO
- Can request reduced sampling if results are below thresholds



Group Monitoring

Public Comment Concerns:

- Groups did not meet individual requirements

Group Monitoring edited to include:

- Quality Assurance Plan
- Sampling protocols
- Representative sampling
- BMPs if high ammonia/EC
- Noncompliance Reporting



Public Comments

Commenters:

- 3 state agencies
- 5 dairy representatives
- 5 environmental organizations
- 1 tribe

Topics:

- Basin Plan/NPS Policy/Anti-degradation
- Water quality monitoring and reporting
- Water quality concerns/enforcement
- Clarifications
- Public review of documents



Changes to Proposed Order

- Additional Findings:
 - ✓ Basin Plan-Water Quality Objectives,
 - ✓ Anti-degradation,
 - ✓ Nonpoint Source Policy
- NOI/Water Quality Plan due dates extended
- NMP – Worksheet added
- Noncompliance reporting
- Clarification language added throughout



Anti-Degradation

- Order does not permit degradation of water quality below water quality objective.
- Monitoring and reporting in place to detect degradation
- Implementation of Order requirements will ensure environmental/water quality benefits, preserve economic value/local communities



Anti-Degradation (cont'd)

- Implementation of BMP's and Best Practicable Treatment and Control Methods:
 - ✓ Water Quality Management Plans
 - ✓ Nutrient Management Plans
 - ✓ Riparian Management Plans
 - ✓ Title 27 requirements
 - ✓ Additional Management Measures required by Order



Non-Point Source Policy

Order Meets NPS Policy requirements:

1. Prohibitions against exceedance of water quality standards
2. Practices include implementation of management measures, submission of Plans and reporting requirements
3. Management measures must be immediately improved if not effective



Non-Point Source Policy (cont'd)

4. Monitoring, reporting, inspections provide feedback to verify compliance
5. Corrective action required if practices are not effective:
 - ✓ Additional monitoring
 - ✓ Implementation of improved management measures
 - ✓ Enforcement actions



Changes to Proposed Order

Related to Monitoring:

- Bacteria monitoring added to surface water sampling
- Reduced groundwater sampling if requested/authorized
- Dry season visual inspection of potential biostimulatory conditions upstream/downstream of dairy
- Added detail regarding representative sampling

Nonpoint Source Policy





Compliance Assurance

Goal is to gain compliance through:

- Education workshops
- Staff inspections including complaint response
- Staff review of reports
- Progressive enforcement
- Maintenance and administration of the program



Change Sheet

GWDR:

- Finding and Condition to retain:
NPDES Order R1-2012-0001
- NOI due Oct. 1, 2019
- NMP submittal by Dec. 31, 2020
- NMP revisions submitted within 30 days
- Old orders listed expire Dec. 31, 2019



Change Sheet (continued)

MRP:

- Add surface water sampling within 18 hours of 1" storm
- Group monitoring must have quality assurance
- NMP submit by Dec 31, 2020 and revisions within 30 days

NMP:

- Submit by Dec 31, 2020 and revisions within 30 days
- Manifests for (manure) transfers must address solid and liquid waste

REQUIREMENT	2019
Notice of Intent	Oct. 1, 2019
Water Quality Plan	Oct. 1, 2020
Riparian Management Plan	Nov. 30, 2020
NMP completion	Nov. 30, 2020
NMP submittal due	Dec. 31, 2020
NMP Worksheet due	Nov. 30, 2021
Annual Reports	Nov. 30 annually begin 2021
Surface Water Monitoring	3 times/winter
Groundwater Monitoring	Year 1, 2, 3, then every 2 years



Staff Recommendation

Adoption of:

- Proposed GWDR Order R1-2019-0001
- Mitigated Negative Declaration-Attachment F
- Change Sheet



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Thank You

- Questions
- Comments

